IN THE CLAIMS

Please cancel claims 1, 12 and 22, amend claim 19 and add new claims 33-37. A list of the pending claims follow.

Pending Claims

1. (Canceled)

2-11 (Withdrawn)

12. (Cancelled)

13-18 (Withdrawn)

19. (Currently Amended) The device of claim [[12]] 36 wherein the non-coiled distal portion of the distal shaft section which has no electrodes has a length of about 2 to about 8 cm.

20-21 (Withdrawn)

22. (Cancelled)

23-31 (Withdrawn)

32. (Canceled)

33. (New) An electrophysiology device configured to be delivered through an inner lumen of a guide catheter to a desired intracorporeal location, comprising:

a) an elongated shaft which has a proximal shaft section and a distal shaft section, the distal shaft section having a helically shaped proximal portion with at least one turn;

b) at least first and second electrodes on the helically shaped proximal portion of the distal shaft section; and

c) a centrally disposed, inner core member which extends through at least the proximal portion of the distal shaft section, which is formed at least in part of superelastic NiTi alloy and which is in the shape of a helical coil to thereby cause the proximal portion of the distal shaft section to take a helical shape with at least one loop having operative transverse dimensions in an unstressed condition.

34. (New) The electrophysiology device of claim 33 wherein the loop of the helically shaped proximal portion of the distal shaft section has maximum transverse dimensions larger than transverse dimensions of the inner lumen of the delivery guide catheter.

35. (New) The electrophysiology device of claim 33 wherein a 360° loop of the helically shaped proximal portion of the distal shaft section has a circumference of about 15 to about 40 mm.

36. (New) The electrophysiology device of claim 33 wherein a 360° loop of the helically shaped proximal portion of the distal shaft section has a circumference of about 15 to about 30 mm.

37. (New) The electrophysiology device of claim 33 wherein the helically shaped proximal portion of the distal shaft section has at least one temperature sensor between the first and second electrodes.

38. (New) The electrophysiology device of claim 33 wherein the distal shaft section has a non-coiled distal portion that has no electrodes along a substantial length thereof.

39. (New) The electrophysiology device of claim 38 wherein the non-coiled distal portion extends in a substantially straight configuration distally from the helically shaped proximal portion.

40. (New) The electrophysiology device of claim 33 wherein the distal shaft section has a diameter less than about 5 French.

41. (New) The electrophysiology device of claim 33 wherein the distal shaft section has a diameter less than about 4 French.

42. (New) The electrophysiology device of claim 33 wherein the distal shaft section has from 4 to 12 electrodes.

43. (New) The electrophysiology device of claim 33 wherein the electrodes are spaced from each other a distance of about 1 to about 3 mm.

44. (New) The electrophysiology device of claim 33 wherein the distal shaft section has a flexible distal tip coil.

45. (New) The electrophysiology device of claim 44 wherein the core member extends through the flexible distal tip coil and is secured to a distal end thereof.

46. (New) The electrophysiology device of claim 44 wherein the flexible distal tip coil has a length of about 1 to about 3 cm.

47. (New) An electrophysiology system comprising:

a) a guide catheter which has proximal and distal ends, a discharge port in the distal end and an inner lumen extending therein to and in fluid communication with the port in the distal end and which is configured to be advanced within a patient's vasculature to a desired intracorporeal location;

b) an electrophysiology device slidably which is disposed within the inner lumen of the guiding catheter and which is configured to form a lesion within the patient's heart, comprising:

i. an elongated shaft which has a proximal shaft section and a distal shaft section, the distal shaft section having a helically shaped proximal portion with at least one loop;

ii. at least first and second electrodes on the helically shaped proximal portion of the distal shaft section; and

iii a centrally disposed, inner core member which extends through at least the proximal portion of the distal shaft section, which is formed at least in part of superelastic NiTi alloy and which is in the shape of a helical coil to thereby cause the proximal portion of the distal shaft section to take a helical shape with at least one loop having operative transverse dimensions in an unstressed condition when the proximal portion extends out of the port in the distal end of the guiding catheter.

48. (New) A method of forming a circular or helical lesion within a patient's heart, comprising:

a. providing a guiding catheter which is configured to be advanced through the patient's vasculature to the desired location within the patient's heart;

b. providing an electrophysiology device which comprises

i) an elongated shaft which has a proximal shaft section and a distal shaft section, the distal shaft section having a helically shaped proximal portion with at least one loop;

ii) at least first and second electrodes on the helically shaped proximal portion of the distal shaft section; and

iii) a centrally disposed, inner core member which extends through at least the proximal portion of the distal shaft section, which is formed at least in part of superelastic NiTi alloy and which is in the shape of a helical coil to thereby cause the proximal portion of the distal shaft section to take a helical shape with a loop thereof having operative transverse dimensions in an unstressed condition;

c. disposing the electrophysiology device within the inner lumen of the guiding catheter with the helically shaped proximal portion of the electrophysiology device being constricted within the inner lumen of

the guiding catheter to transverse dimensions smaller than the unstressed transverse dimensions;

d. advancing the electrophysiology device within the inner lumen of the guiding catheter until the helically shaped proximal portion of the electrophysiology device extends out of the distal end of the guiding catheter where the at least one turn of the helically shaped portion self-expands to an operative transverse dimension to fit against the desired intracorporeal location; and

e. delivering high frequency electrical power to a plurality of electrodes on the proximal portion of the distal shaft section to form a lesion.

49. The method of claim 48 wherein the lesion formed is less than about 7 mm in width.

50. The method of claim 48 wherein the lesion formed is less than about 4 mm in width.